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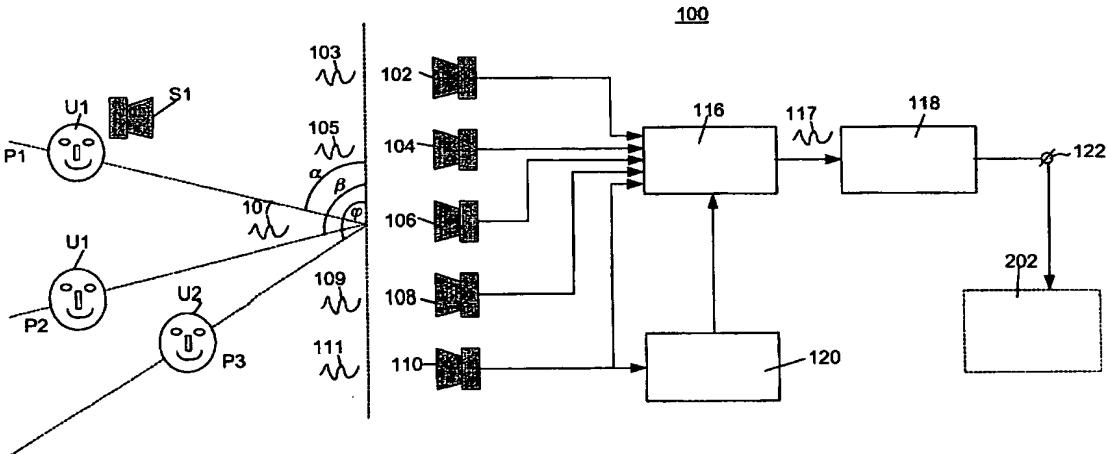
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- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG,*

[Continued on next page]

(54) Title: CONTROLLING AN APPARATUS BASED ON SPEECH



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(57) Abstract: The speech control unit (100) comprises: a microphone array, comprising multiple microphones (102, 104, 106, 108 and 110) for receiving respective audio signals (103, 105, 107, 109 and 111); a beam forming module (116) for extracting a clean, i.e. speech, signal (117) of a user (U1), from the audio signals; a keyword recognition system (120) for recognition of a predetermined keyword that is spoken by the user (U1) and which is represented by a particular audio signal (111) and being arranged to control the beam forming module, on basis of the recognition; and a speech recognition unit (118) for creating an instruction for the apparatus (200) based on recognized speech items of the speech signal (117). As a consequence, the speech control unit (100) is more selective for those parts of the audio signals for speech recognition which correspond to speech items spoken by the user (U1).



ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

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A. CLASSIFICATION OF SUBJECT MATTER

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Minimum documentation searched (classification system followed by classification symbols)

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Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC, COMPENDEX, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>STURIM D E ET AL: "Tracking multiple talkers using microphone-array measurements" ACOUSTICS, SPEECH, AND SIGNAL PROCESSING, 1997. ICASSP-97., 1997 IEEE INTERNATIONAL CONFERENCE ON MUNICH, GERMANY 21-24 APRIL 1997, LOS ALAMITOS, CA, USA, IEEE COMPUT. SOC, US, 21 April 1997 (1997-04-21), pages 371-374, XP010226212 ISBN: 0-8186-7919-0</p> <p>---</p> <p style="text-align: center;">-/-</p>	

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>BASU S ET AL: "Wearable phased arrays for sound localization and enhancement" WEARABLE COMPUTERS, THE FOURTH INTERNATIONAL SYMPOSIUM ON ATLANTA, GA, USA 16-17 OCT. 2000, LOS ALAMITOS, CA, USA, IEEE COMPUT. SOC, US, 16 October 2000 (2000-10-16), pages 103-110, XP010525999 ISBN: 0-7695-0795-6</p> <p>---</p>	
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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